EFB Advisory Circular Final Version

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Electronic Flight Bag (EFB) Systems can be called:

- Portable electronic devices (PED),

- Auxiliary performance computers (APC) or

- Auxiliary performance laptop computers (LAPC)

EFB Classifications Determine:

- EFB Type

- AEG Involvement

- AIR Involvement

- Operator Requirements

- Type of Data Functionality

- PAI Involvement

- POI Acceptance and Approval

EFB TYPES

- CLASS 1 EFB Type Systems

- CLASS 2 EFB Type Systems

- CLASS 3 EFB Type Systems

CLASS 1 TYPE EFB

- COTS-based
- Portable electronic device-battery power
- Not attached to an aircraft mounting device
- Do not require admin control process
- Stowed for T/O and landing
- No data link connectivity/No GPS
- Cannot replace paper entirely in the cockpit

CLASS 1 TYPE EFB

- Operator must provide non-interference per Section 91.21

- Data updates-- maintenance manual/inspection program

- POI Approval:
  - Part 91: no reqm't
  - Parts 121, 125, 135 POI accepts data as presented
  - Parts 121 & 135-- training required as appropriate

CLASS 2 TYPE EFB SYSTEMS
Parts 121, 135, 125

- Connects to ship's power during operations

- May be removed from

  aircraft

- May have data link for "one-way" read only

- May have data link

  receive/transmit to

  support AOC

CLASS 2 TYPE EFB SYSTEMS

- Human factors evaluation

- Display charts or

  approach plates

- Panning, scrolling, zooming not permissible for approach charts

- Operator provides controls for risks associated with an identified failure in system

CLASS 2 TYPE EFB Operational Approval

- Non-interference testing for all phases of flight

- Training & Checking

- Maintenance manual/inspection program for removal/installation

- Data updates according to manual or inspection program

- 6-month evaluation period for Paperless Cockpit [or reduced paper]

CLASS 2 TYPE EFB Summary--Parts 121, 125, 135

- Paperless Cockpit
  - Independent EFB system for each flight crewmember
  - 6- month eval period
  - Final FSB Evaluation Report
  - OpSpec A025

- Reduced paper
  - Single EFB system
  - One complete paper set of all applicable data
  - 6-month eval period
  - Final FSB eval Report
  - OpSpec A025 approval

CLASS 2 TYPE EFB
Interactive Weight & Balance

- EFB must have its baseline evaluated by the AEG in FSB Report

- Operational & maintenance procedures

- Training

- OpSpec A025

- OpSpec E096

CLASS 3 TYPE EFB

- Require an STC or certification design approval by AIR
- Guidance for Class 3 is not covered in this Advisory Circular.

Examples of Class 1 Applications

- Flt Ops Manuals
- OpSpecs
- Aircraft performance data (fixed-non-interactive)
- MELs
- Captain's reports
- Fltcrew qualif. logs

- Autopilot approach/autoland records
- Pilot flt/duty logs
- Flightcrew rest logs
- Electronic signature using PKI

Examples of Class 2 Applications

- Non-interactive weather and aeronautical data via data link

- Dynamic interactive aeronautical charts

- Plotting for Class II navigation

- Runway limiting performance calculations

- Data derived from algorithmic data or performance calculations based on software algorithms

Examples of Class 3 Applications

- Aircraft System Performance Monitoring

- All charts used for situational awareness or navigation

- Airspace-related database depictions

- Terrain, Obstacle, & Noise Databases

- ADS-B & TIS-B Traffic Surveillance

- Depictions of own-ship position

- Controller-Pilot Data Link Communications